

# Massachusetts Occupational Injuries and Illnesses

As Compiled by  
The Massachusetts Division of Occupational Safety  
and the U.S. Department of Labor



## Manufacturing Industry 2002 Report

### Select Occupations in the Manufacturing Industry

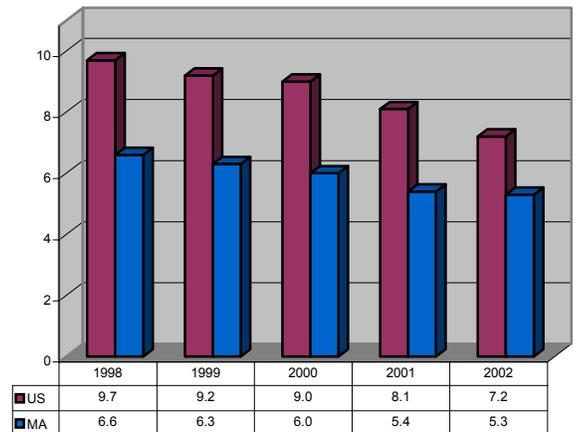
- ◆ Machine operators
- ◆ Assemblers
- ◆ Engineers
- ◆ Printing press operators
- ◆ Chemical technicians
- ◆ Industrial machinery repairers
- ◆ Laborers and material handlers
- ◆ Millwrights
- ◆ Machinists
- ◆ Sewing machine operators
- ◆ Welders and cutters
- ◆ Inspectors

Includes Standard Industrial  
Classification codes 20-39

MA 2002 Population: 6,427,801  
MA 2002 Employment: 3,202,327  
MA 2002 Manufacturing Employment:  
377,237<sup>2</sup>

### Incidence Rates

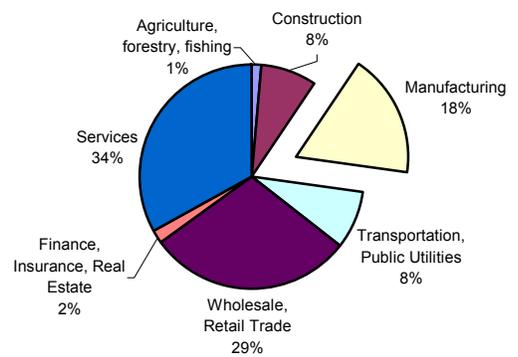
Chart 1: Incidence rates<sup>1</sup> of nonfatal occupational injuries and illnesses (per 100 full time workers), Manufacturing, MA & US 1998-2002



- The incidence rates in MA steadily declined from 1998 to 2002
- MA rates were consistently lower than National rates

### Injury and Illness Numbers

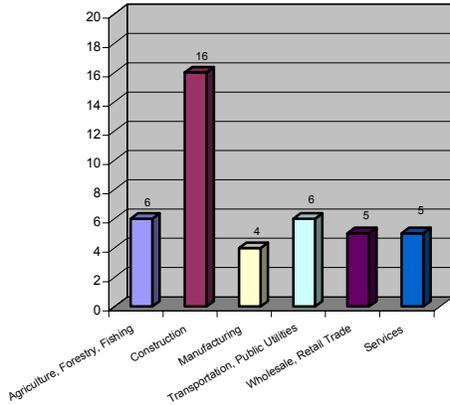
Chart 2: Percent distribution of nonfatal occupational injuries and illnesses by major industry, 2002



- The total number of nonfatal occupational injuries and illnesses in MA in 2002 was 108,900 (all industries)
- Manufacturing industry made up 18% of the total injuries and illnesses in MA, or 19,300

# Fatality Data

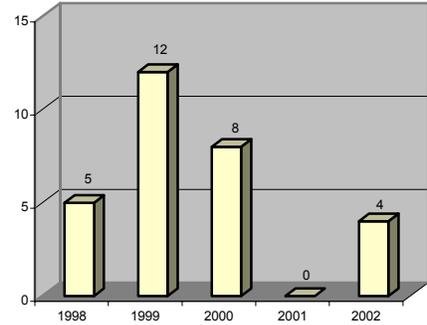
Chart 3: Number of fatal occupational injuries by major industry, 2002



- The Manufacturing industry represented 4 of the 46 fatal injuries in Massachusetts in 2002
- Fatal injuries increased by four from 2001 to 2002 in the Manufacturing industry

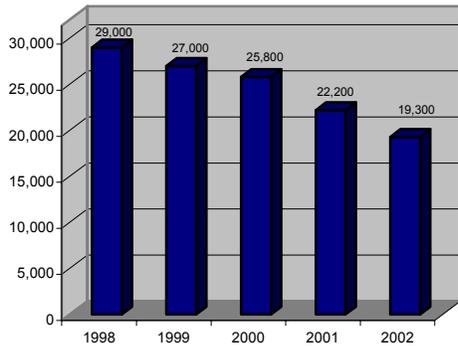
Source: U.S. Department of Labor, Bureau of Labor Statistics, in cooperation with State and Federal agencies, Census of Fatal Occupational Injuries  
NOTE: Some data do not meet publication criteria and will not add to the total.

Chart 4: Number of fatal occupational injuries, Manufacturing, 1998-2002



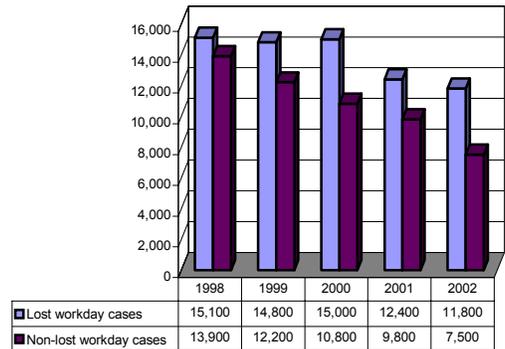
# Injury and Illness Data

Chart 5: Total number of nonfatal injuries and illnesses, Manufacturing, 1998-2002



- The total number of nonfatal injuries and illnesses in the Manufacturing industry in MA has steadily decreased from 1998 to 2002
- There were about 600 fewer lost workday cases in 2002 than in 2001 and 2,300 fewer non-lost workday cases

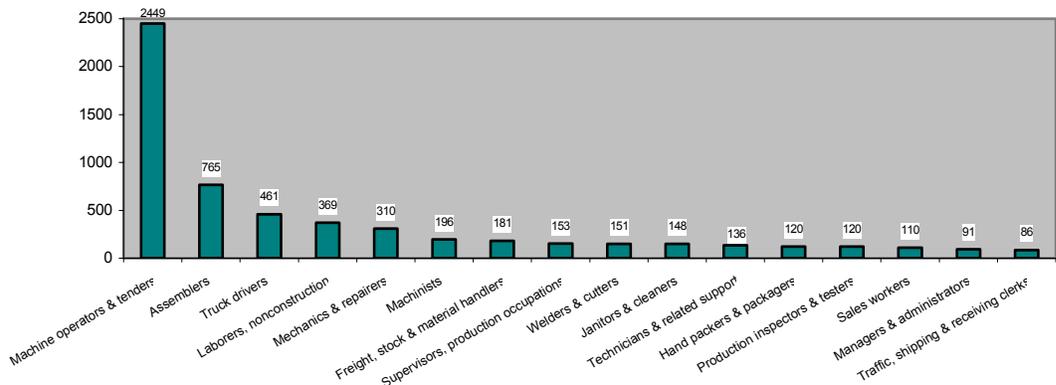
Chart 6: Numbers of Lost workday<sup>3</sup> v. Non-lost workday cases of nonfatal occupational injuries and illnesses, Manufacturing, 1998-2002



# Occupation Data

- Machine operators and tenders and Assemblers had the highest numbers of injuries and illnesses involving days away from work in the Manufacturing industry in 2002, followed by Truck drivers

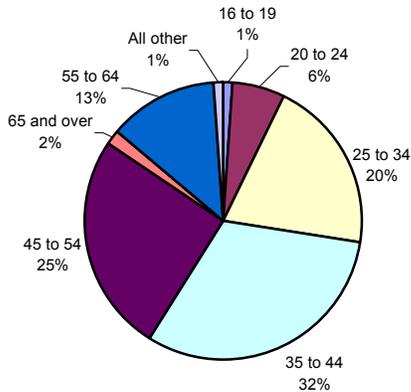
Chart 7: Highest numbers of nonfatal occupational injuries and illnesses involving days away from work by selected worker occupations, Manufacturing, 2002



# Case & Demographic Data

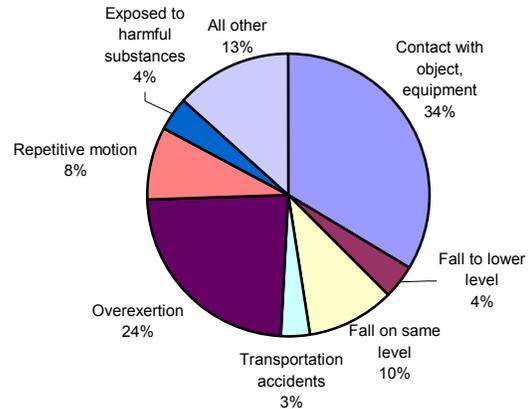
## Age

Chart 8: Percent distribution of nonfatal injuries and illnesses involving days away from work by age of worker, Manufacturing, 2002



## Event or Exposure

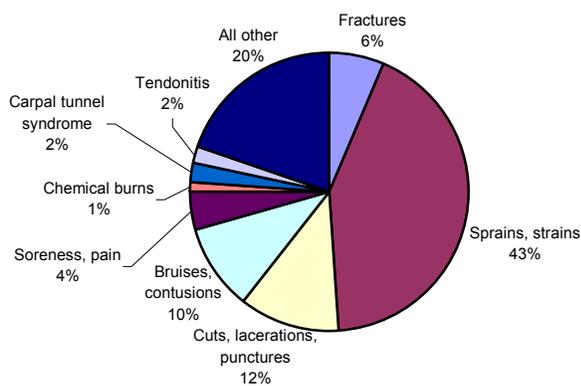
Chart 9: Percent distribution of nonfatal injuries and illnesses involving days away from work by event or exposure, Manufacturing, 2002



- Workers aged 35 to 44 were the most commonly injured workers in the Manufacturing industry in MA
- Most injuries and illnesses in 2002 were caused by contact with objects or equipment or overexertion
- Sprains and strains were the most common nature of injury and illness in the Manufacturing industry
- The back and the upper extremities (arm, wrist, hand, finger, and/or elbow) made up over half of all total injuries and illnesses in 2002

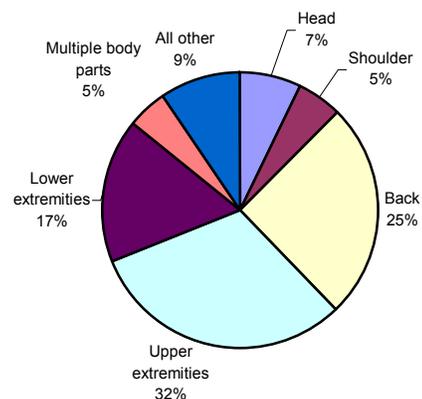
## Nature of Injury

Chart 10: Percent distribution of nonfatal injuries and illnesses involving days away from work by nature of injury, Manufacturing, 2002



## Part of Body

Chart 11: Percent distribution of nonfatal injuries and illnesses involving days away from work by part of body, Manufacturing, 2002



<sup>1</sup> Incidence rates represent the number of injuries and illnesses per 100 full-time workers and were calculated as:  $(N/EH) \times 200,000$  where  
 N = number of injuries and illnesses  
 EH = total hours worked by all employees during the calendar year.

200,000 = base for 100 equivalent full-time workers (working 40 hours per week, 50 weeks per year)

<sup>2</sup> Source: MA Division of Employment and Training 790 Current Employment Statistics Program, and U.S. Census Bureau. Figures are not benchmarked for 2002.

<sup>3</sup> Total lost workday cases involve days away from work, days of restricted work activity, or both.

NOTE: Because of rounding, components may not add to totals.

SOURCE: Bureau of Labor Statistics, U.S. Department of Labor, Survey of Occupational Injuries and Illnesses, in cooperation with participating State agencies.

# Massachusetts Occupational Injuries and Illnesses 2002 Report: Manufacturing Industry



This report was compiled from data collected by the Massachusetts Division of Occupational Safety under a cooperative agreement with the U.S. Department of Labor, Bureau of Labor Statistics. Data has also been included from the Census of Fatal Occupational Injuries and the Massachusetts Division of Employment and Training.

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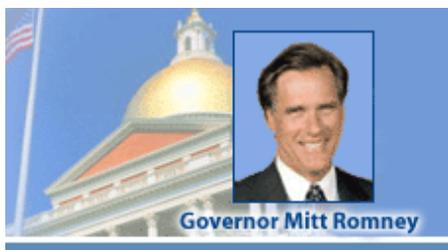
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